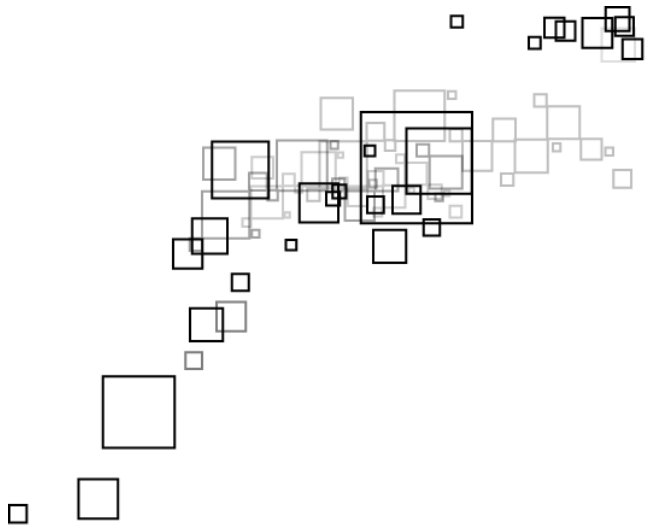

User Manual

HomePlug Mediaxtream Ethernet Adapter

Legal Notice

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Contents

About the Product 4
How Does It Work? 4
Direct Connection 5
Package Contents 6
Device Design 6
How to Use Simple Connect Button 8
Creating a HomePlug Mediaxtream Network 8
Resetting the Private Network Name 13
Joining an Existing HomePlug Mediaxtream Network 14
Joining an Existing HomePlug Mediaxtream Network 17
Joining an Existing HomePlugAV Network 20
Determining Connection Rate 23

Getting Started 24
Plan Your Network 25
Local Network 25
Gaming Network 26
Media Network 26

HomePlug Mediaxtream Utility 27
Requirements 27
Installation 27
Opening HomePlug Mediaxtream Utility 28
The User Interface 28
Home 29
Firmware Upgrade 29

Appendix 31
Frequently Asked Questions 31
European Regulations 33

About the Product

HomePlug Mediaxtream Adapter is ready to use out of the box and does not require the installation of driver software to work. It can be connected to computers, routers, gaming consoles, hubs, and other Ethernet devices regardless of operating system.

How Does It Work?

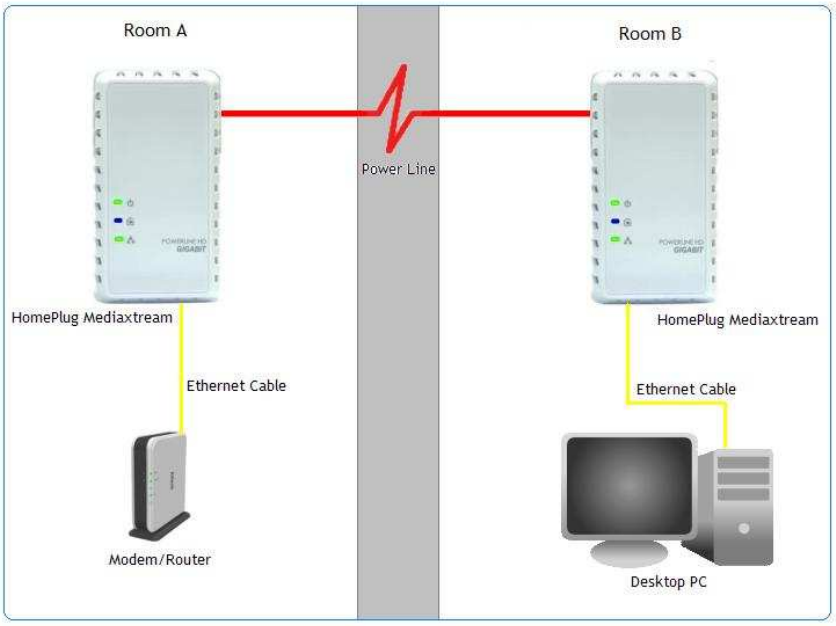
PL1000 HomePlug Mediaxteam is the HomePlugAV plus Gigle MX Technology to have Gigabit Ethernet Port and both of them through Power Line

The HomePlugAV band is compliant with the Homeplug AV specification version 1.1 and is fully interoperable with existing HomeplugAV product. With HomePlugAV band, speed 200Mbps is able to achieve. In addition, Mediaxtream band provides a very high performance PLC channel capable of achieving PHY rates up to 1Gbps.

This model has a true dual-band architecture enabling both the HomePlugAV and Mediaxtream bands to operate concurrently giving a combined PHY rate of over a Gigabit Per Second (Gbps). With this transfer rates, Ethernet can easily support full multimedia home networking throughout the whole house including simultaneous High Definition (HD) and Standard Definition (SD) video distribution, whole-house audio, Voice Over IP and high speed Internet in addition to data networking. It uses the power lines, which already installed in a home as a path to transmit digital data, voice, audio and video between devices.

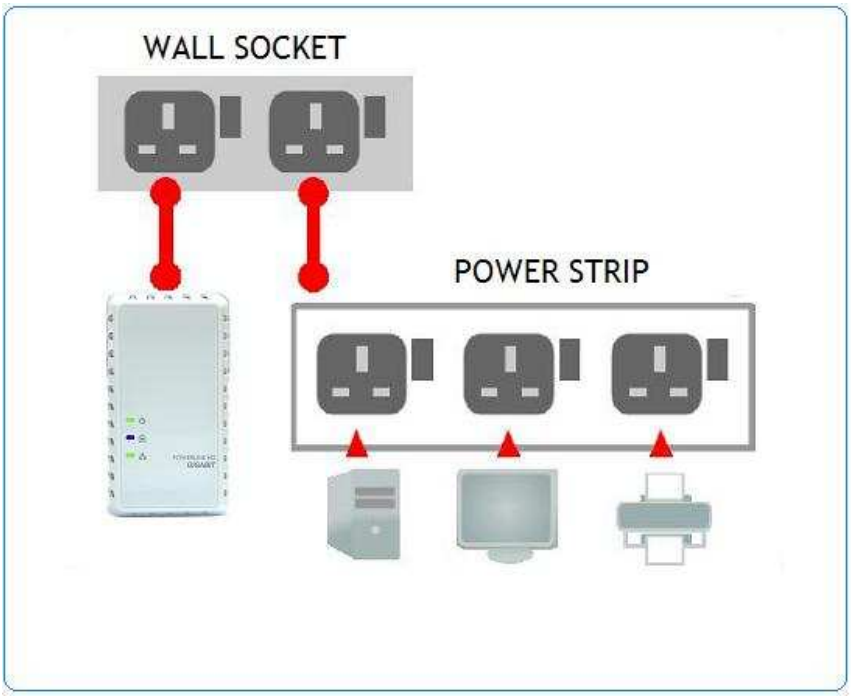
Note: HomePlug Mediaxtream devices are already configured to use a common Private Network Name and are ready to use.

When a HomePlug Mediaxtream communicates with another device, the Powerline Activity LED color will give you an idea about the connection rate: Green means 10Mbps and below or it is on HomePlug AV mode; and Blue means more than 100 Mbps or it is on Mediaxtream mode.



Direct Connection

For best performance, connect HomePlug Mediaxtream directly to a wall outlet. Avoid connecting it to a power strip where other electrical devices are connected. Other devices create electrical noise that may affect its performance.

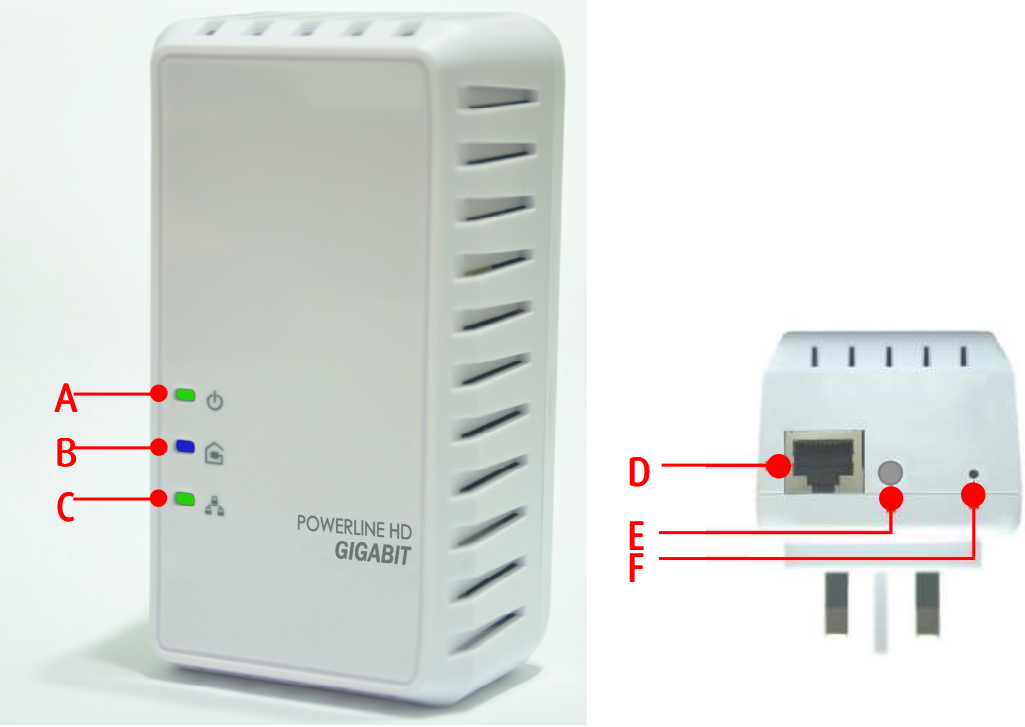


Package Contents

The package contains the following items:

- 1 HomePlug Mediaxteream for Single Pack or 2 HomePlug Mediaxtream for Twin Pack
- 1 Ethernet cable (Cat 5e) for Single Pack or 2 Ethernet cables (Cat5 e) for Twin Pack
- Resource CD
- Easy Start Guide

Device Design

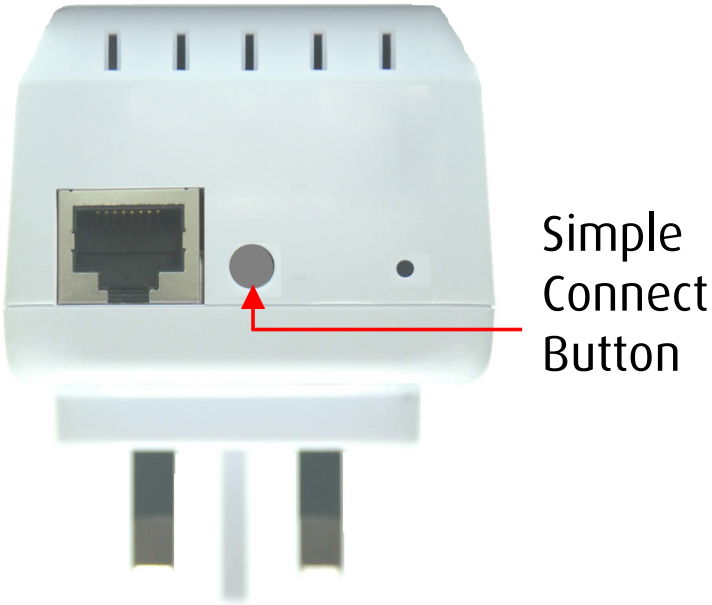


	Label	Status	Description/ Function
A	**Power**	Off	No power.
		On	• After Simple Connect Button is pressed for two seconds, this LED will blink to confirm the button press. • When Simple Connect Button is pressed for 10 seconds, this LED will blink to confirm the Private Network Name reset.
B	**Powerline Activity**	Off	Device is not connected to a HomePlug or Mediaxtream network.
		On	• This LED remains ON when the device is part of a HomePlug or Mediaxtream network. • The LED color represents the connection rate within the HomePlug Mediaxtream network whether it is better (**Green**) or it is on HomePlugAV mode, or best (**Blue**) or it is on Mediaxtream mode. • The LED flashes to indicate network activity.
C	**Ethernet Activity**	Off	An Ethernet device is not connected.
		On	• An Ethernet device is connected. • The LED flashes to indicate Ethernet activity.
D	**Ethernet Port**		Accepts either cross or straight Ethernet cable. (Best to use Cat5 e Ethernet cable)
E	**Simple Connect Button**		• Press Simple Connect Button for two (2) seconds to start pairing. • Press Simple Connect Button for ten (10) seconds to release new Private Network Name. • Press Simple Connect Button for fifteen (15) seconds to initialize Standby Mode • Press Simple Connect Button for five (5) seconds to activate the device from Standby mode.
F	**Reset to Factory Default**		Press for 3 seconds to reset to the factory default settings. When you reset to the factory default, all your configuration changes will be removed.

How to Use Simple Connect Button

Simple Connect Button provides a more convenient way of creating your HomePlug Mediaxtream Network. The button has three main functions which includes:

- Creating a HomePlug Mediaxtream Network
- Resetting the Private Network Name
- Joining an existing to an existing Mediaxtream or HomePlug Network



Creating a HomePlug Mediaxtream Network

To create a HomePlug Mediaxtream Network, you need at least two HomePlug Mediaxtream devices, which is using random Private Network Names. When you press Simple Connect Button on both devices, a common Private Network Name will be automatically generated to enable them to communicate with each other.

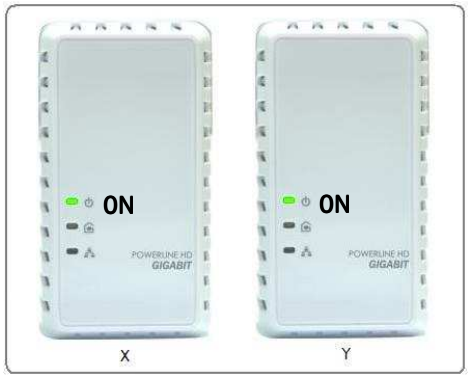
Note: New HomePlug Mediaxtream from a Twin Pack can already communicate with each other out of the box. However, if you intend to create a new Private Network Name using Simple Connect for both devices, you need to reset their Private Network Names to a random key before proceeding.

To create a HomePlug Mediaxtream Network using Simple Connect:

Step 1

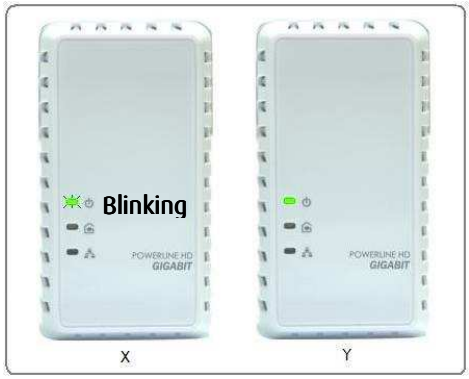
Plug your HomePlug Mediaxtream side by side where you can easily observe the LED behavior.

Upon connection, the Power LED lights ON steadily.



Step 2

Press Simple Connect Button for two seconds on HomePlug Mediaxtream X. After you release the button, the Power LED ⏻ will blink. If the Power LED ⏻ did not blink, press Simple Connect Button again for two seconds.



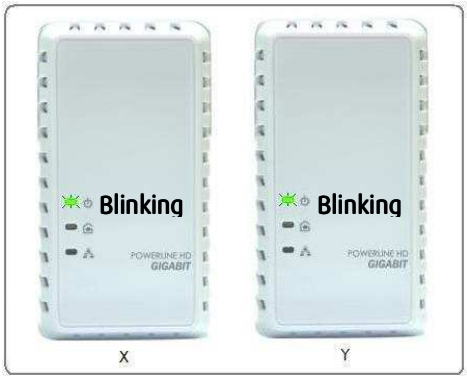
Note: Do not press Simple Connect for more than 2 seconds.

Step 3

Press Simple Connect Button for two seconds on HomePlug Y. After you release the button, the Power LED ⏻ will start to blink. If the Power LED ⏻ did not blink, press Simple Connect Button again for two seconds.

Make sure to press Simple Connect Button on HomePlug Y within two minutes after you press Simple Connect Button on HomePlug X.

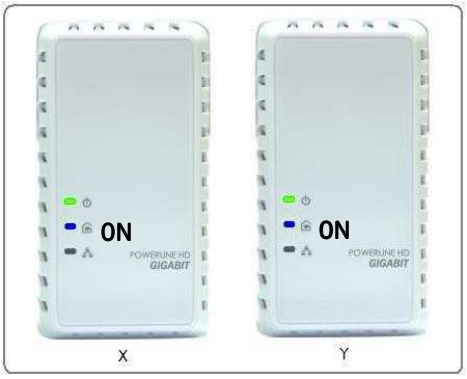
The PL-ACT LEDs on both devices will turn ON once the devices are paired.



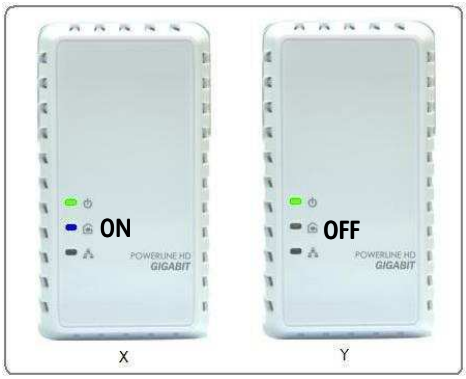
Note: Do not press Simple Connect for more than 2 seconds

Step 4

To confirm if the connection was established, check the LEDs. The Power ⏻ and Powerline Activity LEDs ⌂ on both devices should be ON.



When the Powerline Activity LED ⌂ on either device is off, this means the pairing is NOT successful. In this case, you need to redo the entire process again.

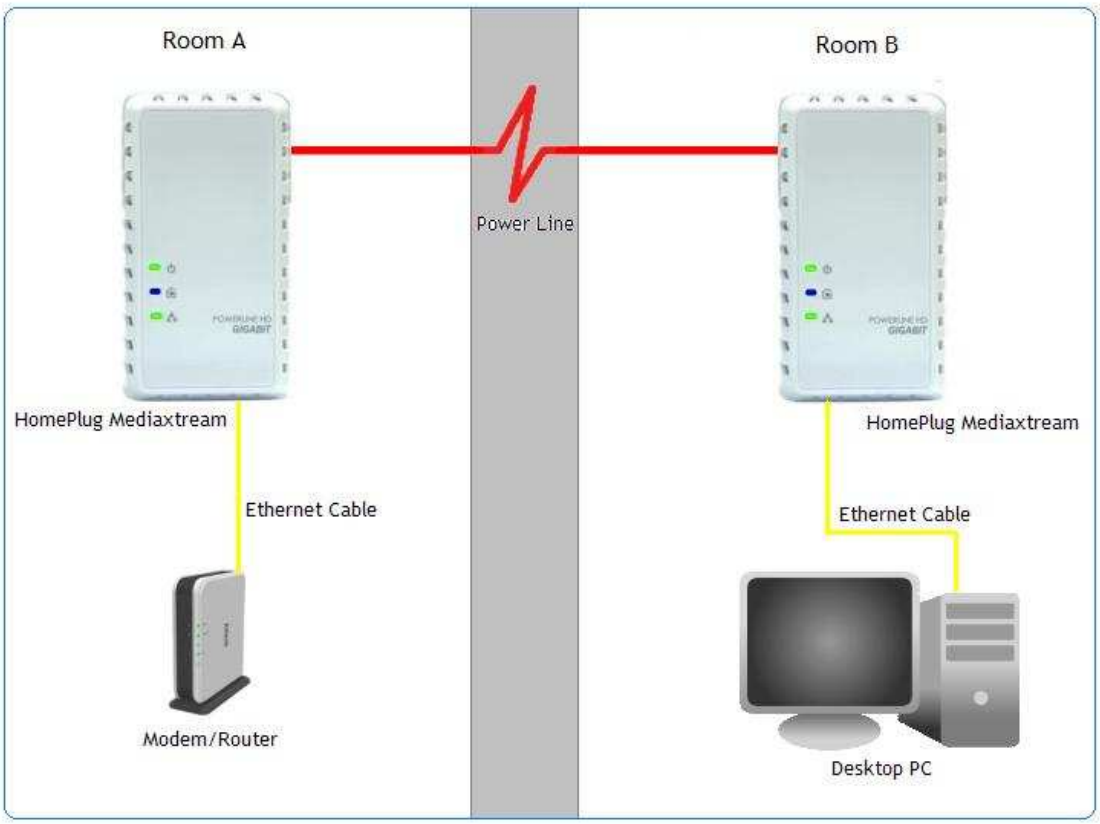


Step 5

Unplug the HomePlug Mediaxtream and then connect them to your Ethernet devices using an Ethernet cables from the product package. After connecting the Ethernet cable, plug the HomePlug Mediaxtream directly to a wall outlet.

An Ethernet-enabled device can be a router, computer, hub, gaming console, IP phone, or network printer.

Note: HomePlug Mediaxtream work best when connected directly to a wall socket. Avoid plugging it to a power strip or power extension. Other electrical devices in the power strip produce electrical noise that may affect the performance of the HomePlug Mediaxtream.



Resetting the Private Network Name

Simple Connect Button allows you to reset the HomePlug Mediaxtream's Private Network Name to a random key. When a HomePlug Mediaxtream is reset to a random key, it will not be able to communicate with any other device.

Note: Resetting the Private Network Name is different from resetting the device to its factory default settings. If you intend to reset the device to its factory default settings, press RESET button on the device.

To reset the Private Network Name using Simple Connect:

Step 1

Press Simple Connect Button for 10 seconds or wait until ALL LED blinks.

Step 2

To confirm the Private Network Name resets, the Powerline Activity LED will switch OFF.

Joining an Existing HomePlug Mediaxtream Network

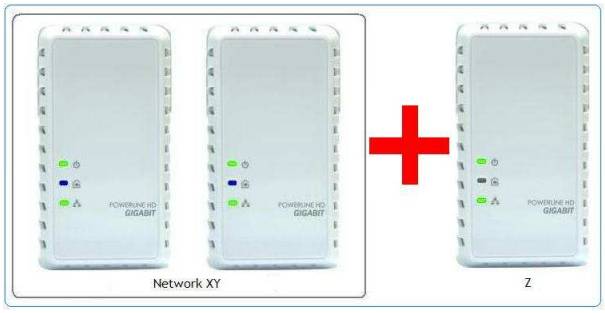
To enable a new device to join an existing network, Simple Connect will copy the Private Network Name of the existing network to the new HomePlug AV. If you pressed Simple Connect from multiple HomePlug AVs, only the signal from the first two devices will be processed.

To join an existing HomePlug AV network using Simple Connect:

Step 1

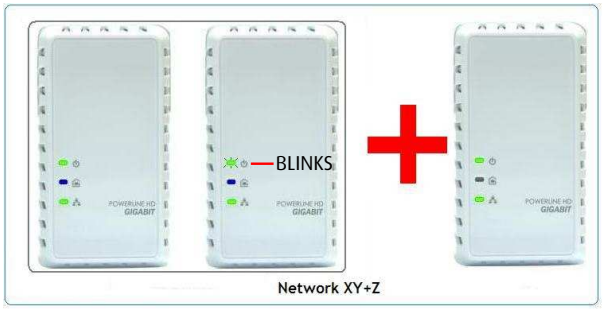
Plug HomePlug Z near a HomePlug from an existing network. Make sure you can easily observe the LED behavior.

Upon connection, HomePlug Z's LEDs will blink simultaneously and then the Power LED lights on steadily.



Step 2

Press Simple Connect Button for two seconds from a HomePlug Mediaxtream in an existing network. After you release the button, the Power LED will blink. If the Power LED did not blink, press Simple Connect Button again for two seconds.



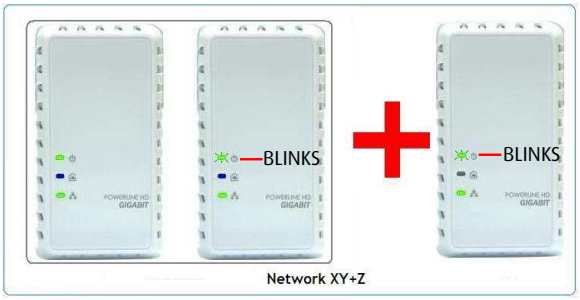
Note: Do not press Simple Connect for more than 2 seconds.

Step 3

Press Simple Connect Button for two seconds on HomePlug Mediaxtream Z. After you release the button, the Power LED ⏻ will blink. If the Power LED ⏻ did not blink, press Simple Connect Button again for two seconds.

Make sure to press Simple Connect Button on HomePlug Mediaxtream Z within two minutes after you press Simple Connect Button from the existing network.

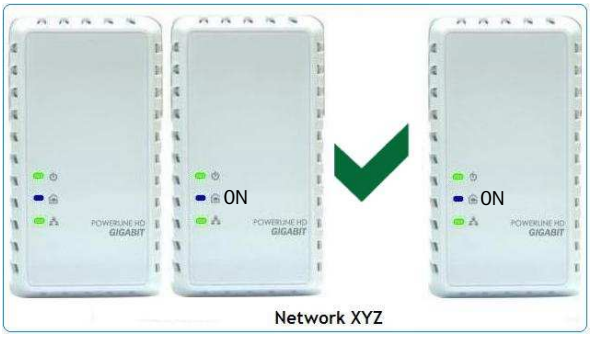
The Power LEDs on both devices will continuously blink to signify that they are searching for another device to pair with.



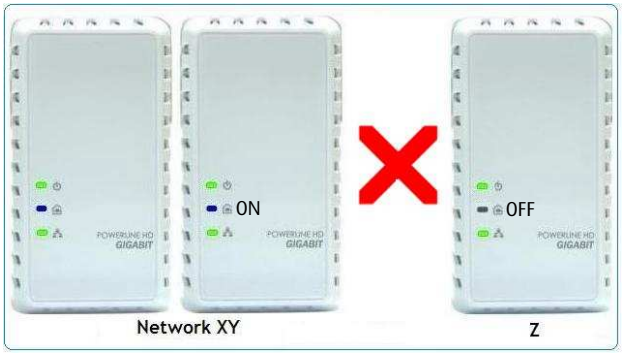
Note: Do not press Simple Connect for more than 2 seconds.

Step 4

To confirm if the connection was established, check the LEDs. The Power LEDs ⏻ and the Powerline Activity LEDs ⌂ on all devices are ON.



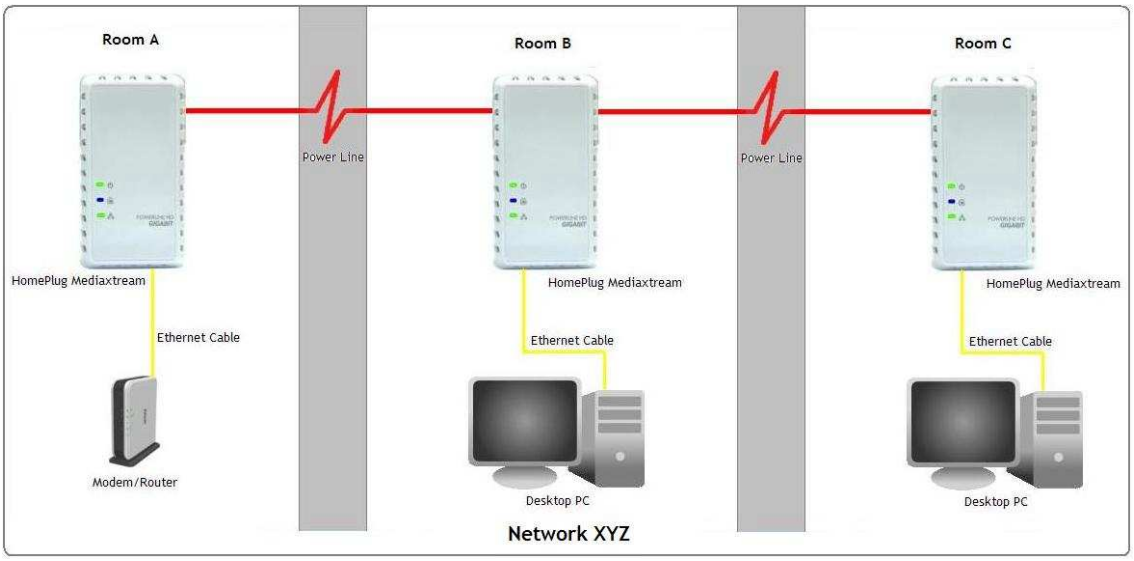
If the Powerline Activity LED on HomePlug Z is OFF, this means the pairing was not successful. You need to repeat the process again.



Step 5

Unplug HomePlug Mediaxtream Z and then connect it to your Ethernet device using the Ethernet cables from the product package. After connecting the Ethernet cable, plug HomePlug Z directly to a wall outlet. An Ethernet-enabled device can be a router, computer, hub, gaming console, IP phone or network printer.

Note: HomePlug Mediaxtream work best when connected directly to a wall socket. Avoid plugging it to a power strip or power extension. The other electrical devices in the power strip create noise that may affect the performance of the HomePlug.



Joining an Existing HomePlug Mediaxtream Network

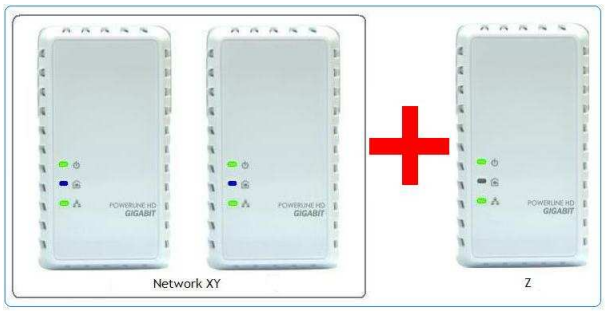
To enable a new device to join an existing network, Simple Connect will copy the Private Network Name of the existing network to the new HomePlug AV. If you pressed Simple Connect from multiple HomePlug AVs, only the signal from the first two devices will be processed.

To join an existing HomePlug AV network using Simple Connect:

Step 1

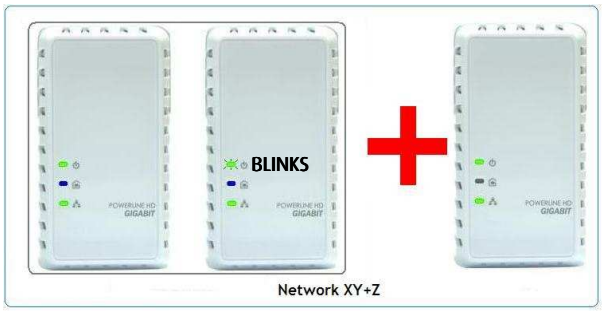
Plug HomePlug Z near a HomePlug from an existing network. Make sure you can easily observe the LED behavior.

Upon connection, HomePlug Z's LEDs will blink simultaneously and then the Power LED lights on steadily.



Step 2

Press Simple Connect Button for two seconds from a HomePlug Mediaxtream in an existing network. After you release the button, the Power LED will blink. If the Power LED did not blink, press Simple Connect Button again for two seconds.



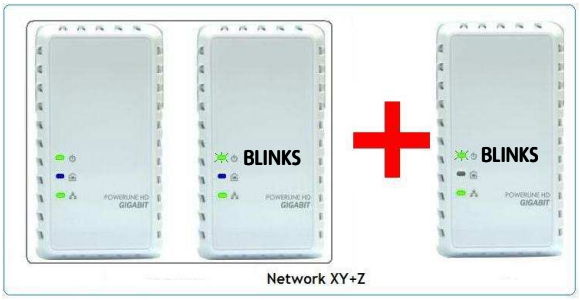
Note: Do not press Simple Connect for more than 2 seconds.

Step 3

Press Simple Connect Button for two seconds on HomePlug Mediaxtream Z. After you release the button, the Power LED ⏻ will blink. If the Power LED ⏻ did not blink, press Simple Connect Button again for two seconds.

Make sure to press Simple Connect Button on HomePlug Mediaxtream Z within two minutes after you press Simple Connect Button from the existing network.

The Power LEDs on both devices will continuously blink to signify that they are searching for another device to pair with.



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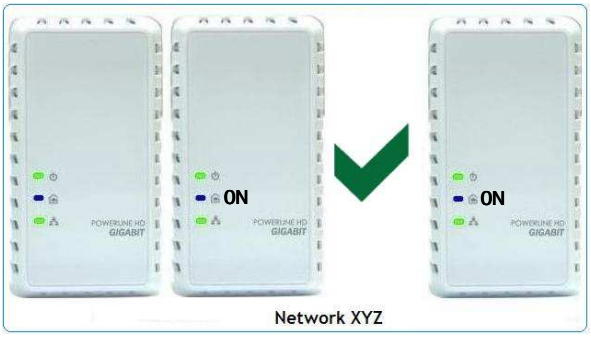
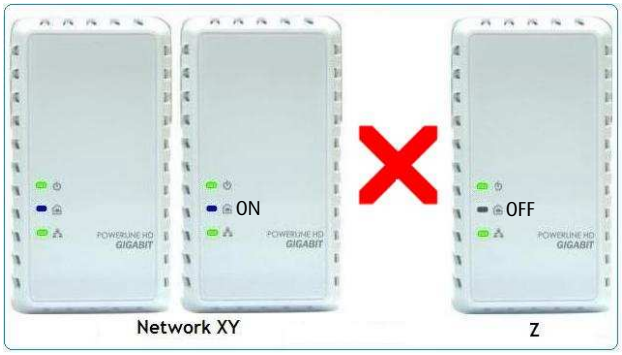
Step 4

To confirm if the connection was established, check the LEDs. The Power LEDs ⏻ and the Powerline Activity LEDs ⌂ on all devices are ON.



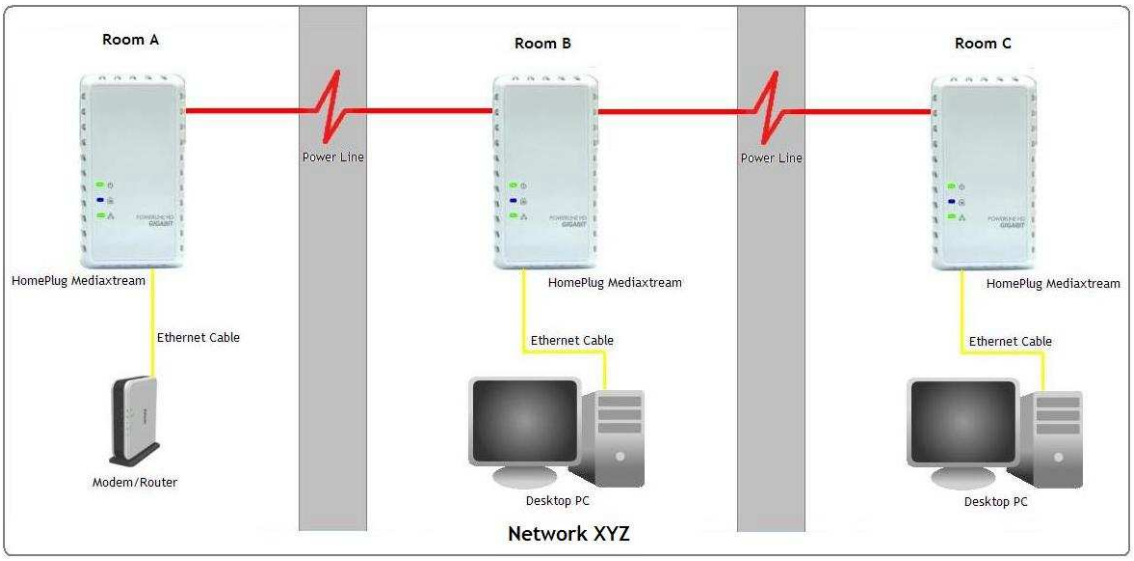
If the Powerline Activity LED on HomePlug Z is OFF, this means the pairing was not successful. You need to repeat the process again.



Step 5

Unplug HomePlug Mediaxtream Z and then connect it to your Ethernet device using the Ethernet cables from the product package. After connecting the Ethernet cable, plug HomePlug Z directly to a wall outlet. An Ethernet-enabled device can be a router, computer, hub, gaming console, IP phone or network printer.

Note: HomePlug Mediaxtream work best when connected directly to a wall socket. Avoid plugging it to a power strip or power extension. The other electrical devices in the power strip create noise that may affect the performance of the HomePlug.



Joining an Existing HomePlugAV Network

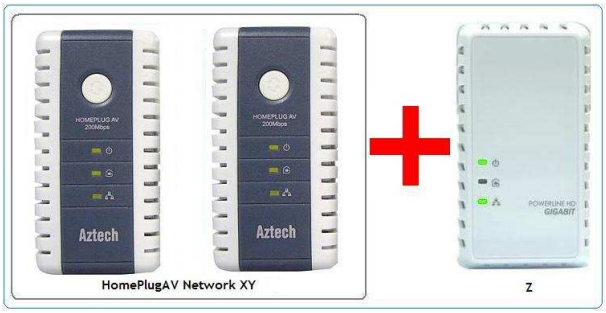
To enable a new device to join an existing HomePlugAV network, Simple Connect Button will copy the Private Network Name of the existing network to the HomePlug Mediaxtream. If you pressed Simple Connect from multiple HomePlug AVs, only the signal from the first two devices will be processed.

To join an existing HomePlug AV network using Simple Connect:

Step 1

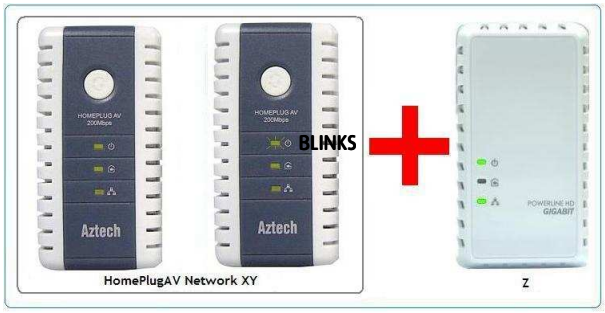
Plug HomePlug Z near a HomePlug from an existing network. Make sure you can easily observe the LED behavior.

Upon connection, HomePlug Z's LEDs will blink simultaneously and then the Power LED lights on steadily.



Step 2

Press Simple Connect Button for two seconds from a HomePlugAV in an existing network. After you release the button, the Power LED will blink. If the Power LED did not blink, press Simple Connect Button again for two seconds.



Note: Do not press Simple Connect for more than 2 seconds.

Step 3

Press Simple Connect Button for two seconds on HomePlug Mediaxtream Z. After you release the button, the Power LED ⏻ will blink. If the Power LED ⏻ did not blink, press Simple Connect Button again for two seconds.

Make sure to press Simple Connect Button on HomePlug Mediaxtream Z within two minutes after you press Simple Connect Button from the existing network.

The Power LEDs on both devices will continuously blink to signify that they are searching for another device to pair with.

Note: Do not press Simple Connect for more than 2 seconds.

Step 4

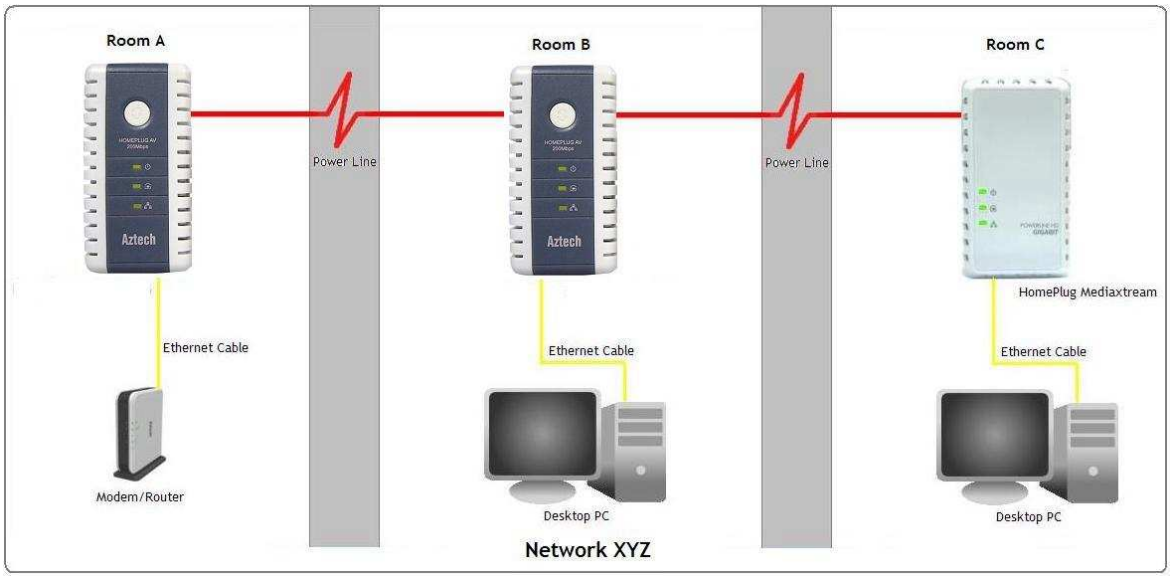
To confirm if the connection was established, check the LEDs. The Power LEDs ⏻ and the Powerline Activity LEDs ⌂ on all devices are ON.

If the Powerline Activity LED on HomePlug Z is OFF, this means the pairing was not successful. You need to repeat the process again.

Step 5

Unplug HomePlug Mediaxtream Z and then connect it to your Ethernet device using the Ethernet cables from the product package. After connecting the Ethernet cable, plug HomePlug Z directly to a wall outlet. An Ethernet-enabled device can be a router, computer, hub, gaming console, IP phone or network printer.

Note: HomePlug Mediaxtream work best when connected directly to a wall socket. Avoid plugging it to a power strip or power extension. The other electrical devices in the power strip create noise that may affect the performance of the HomePlug.



Determining Connection Rate

Each LED color of the Powerline Activity represents a connection rating. The connection rating can only be calculated when the device is part of an existing network.

Green

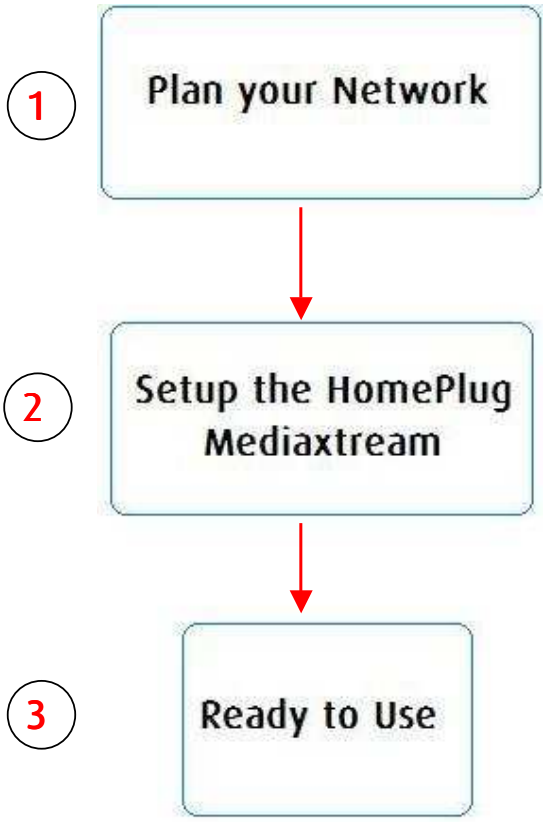
Connection rate is
100 Mbps and below

Blue

Connection rate is
up to 1 Gbps

Getting Started

Setting up the device is easy. The flowchart below provides an outline of the steps you need to complete the installation. There are brief descriptions beside each step to help you along. Detailed instructions are provided in the subsequent pages.



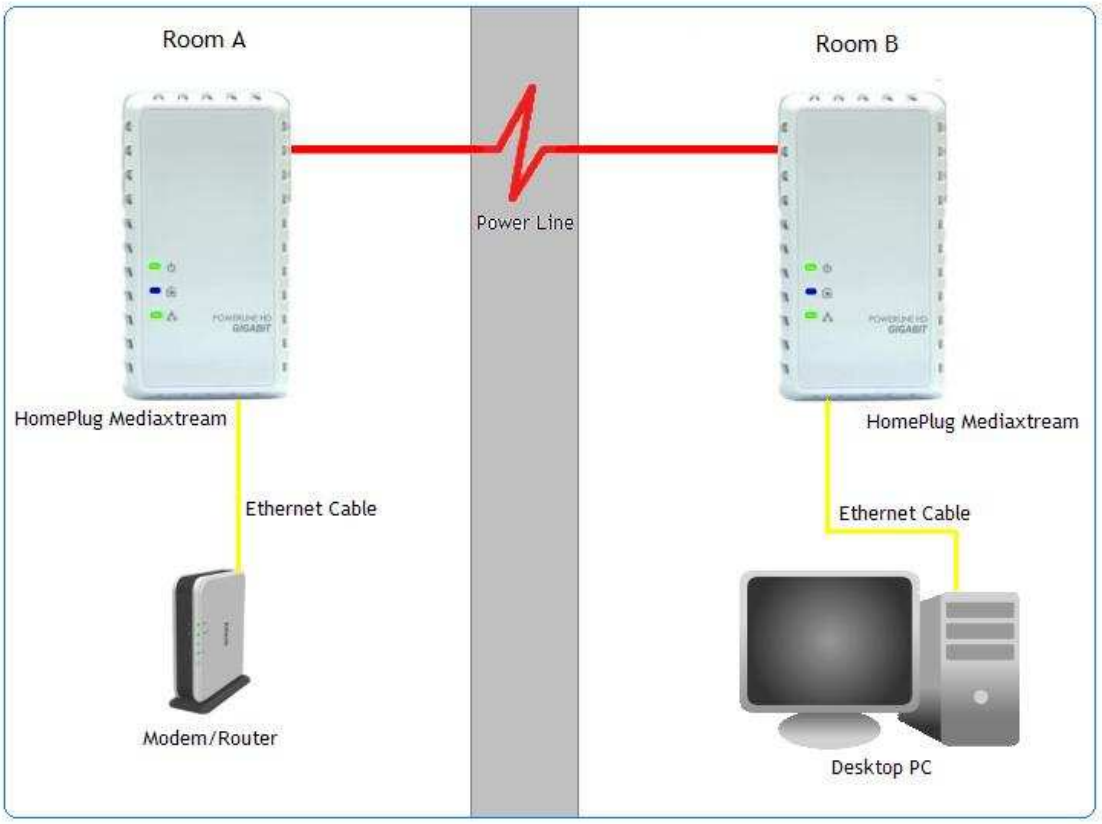
Use an Ethernet cable (Cat5 e) to connect HomePlug Mediaxtream to your computer or Ethernet device.

Plan Your Network

Here are ideas on how you can plan your HomePlug Mediaxtream network.

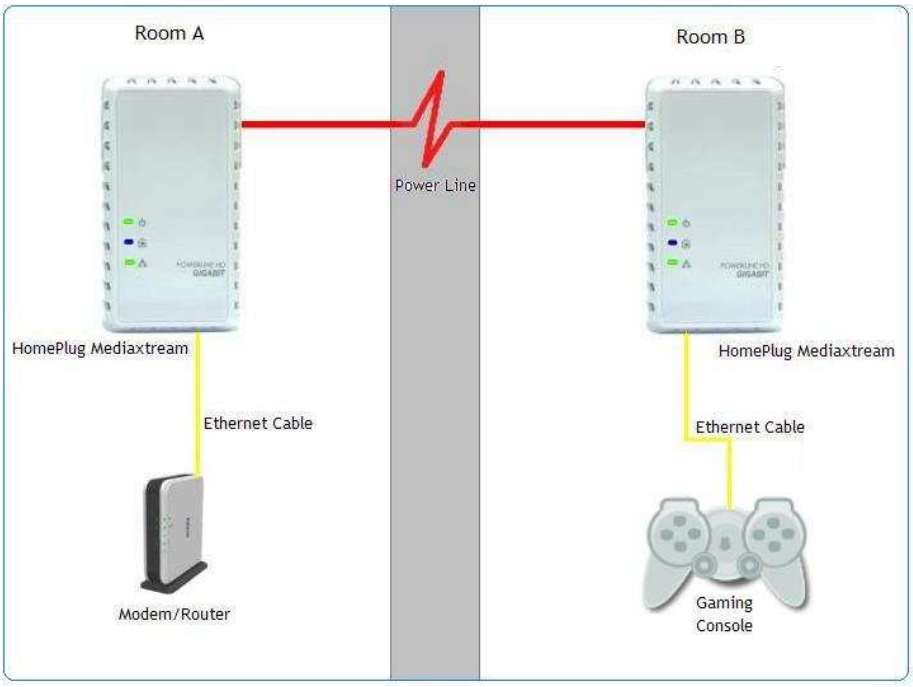
Local Network

Share ultra fast Internet connection with any computer wherever it is in the house.



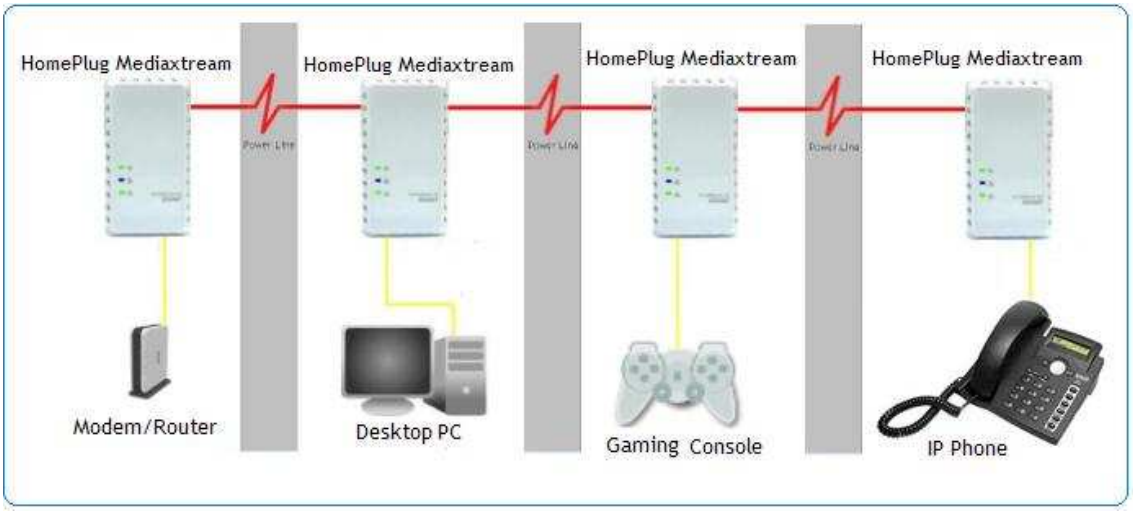
Gaming Network

Connect your gaming console to the Internet and compete with other online players.



Media Network

Realize your high tech lifestyle by converging your IP devices into a single network.



HomePlug Mediaxtream Utility

HomePlug Mediaxtream Utility is a software application that allows you to change the current firmware of your device. Installation is straightforward and the user interface is easy to use.

Note: To use HomePlug Mediaxtream Utility, you need a computer using a Windows operating system with the .NET Framework installed. If you do not have .NET installed, the HomePlug Mediaxtream installer will install it for you.

Requirements

Your computer must meet the following requirements:

- Windows XP (32 and 64 bit), or Vista (32 and 64 bit)
- 300 MHz Processor
- 128 Mb of RAM
- .NET Framework
- Network Interface Card
- CD-ROM
- 128 Mb of free hard disk space

Installation

To install HomePlug Mediaxtream Utility:

1. Insert the Resource CD that comes with HomePlug Mediaxtream package into the CD-ROM drive.
2. Click the Start button, and then click Run.
3. In the Run dialog box, type D:\Setup.exe (where D: is your CD-ROM drive), and then click OK.
4. Follow the instructions on the installation wizard.

Two applications will be installed in your computer - HomePlug Mediaxtream Utility will be installed first followed by .NET Framework. The installer detects any version of .NET Framework in your computer. If .NET Framework is not installed, a dialog box opens to ask if you would like to install .NET Framework. Click Yes. The .NET Framework will not be installed if the required version is already in your computer.

Operating System	.NET Framework version to be installed
XP and Vista 32-bit	.NET Framework 2.0 32-bit
XP and Vista 64-bit	.NET Framework 2.0 64-bit

Opening HomePlug Mediaxtream Utility

Two ways to open HomePlug Mediaxtream Utility:

- Right-click the HomePlug Mediaxtream Utility desktop shortcut and then select Open.
- Click the Start button, click Programs, click HomePlug Mediaxtream then click HomePlug Mediaxtream Utility.

The User Interface

The HomePlug AV Utility user interface is divided into tabs. These tabs include:

- Home
- Firmware Upgrade

Home

To start a task, you first need to select the network card connected to your HomePlug Mediaxtream. This is most helpful when you have more than one network card in your computer. When you select a network card, the MAC Address of the HomePlug Mediaxtream connected to your computer appears. If there is no HomePlug Mediaxtream connected to your computer, no MAC address will appear.

Firmware Upgrade

Use Firmware Upgrade to upgrade firmware of HomePlug Mediaxtream. After upgrading the firmware, HomePlug Mediaxtream will still retain the same Private Network Name and MAC address settings. You can download upgrade files from the product's Web site.

To upgrade the firmware of a HomePlug AV:

1. Connect HomePlug Mediaxtream to the computer where you are using HomePlug Mediaxtream Utility.
2. Open HomePlug Mediaxtream Utility.

3. Click Firmware Upgrade.
4. Click Upgrade to select the location of the firmware files. After you select the location of the firmware files, the upgrade will immediately start.

Appendix

Frequently Asked Questions

Can I use HomePlug Mediaxtream with older HomePlug AV versions?

HomePlug Mediaxtream versions can communicate with HomePlug AV. HomePlug Mediaxtream, however, is not backward compatible with HomePlug 1.0 releases.

Can HomePlug Mediaxtream be used alongside HomePlug AV devices within the network?

HomePlug Mediaxtream and HomePlug AV standards can coexist and will be able to communicate with each other.

Which operating system (OS) is compatible with HomePlug Mediaxtream?

HomePlug Mediaxtream is operating system independent. This device does not require the installation of driver software to work.

How difficult is it to set up a network with HomePlug AV?

HomePlug Mediaxtream is a plug and play device just like the existing HomePlug AV devices. Connect it to an Ethernet device, plug it to a wall socket, and it is ready to use. Even the most inexperienced user can set up the network with ease.

Does HomePlug Mediaxtream have a security mechanism?

Yes. HomePlug Mediaxtream uses 128-bit AES encryption and neighbor isolation.

HomePlug Mediaxtream requires Gigabit Ethernet Network Interface Card to work?

No, but it is best to use with a Gigabit Ethernet Network Interface card to utilize the maximum speed of the device.

Do I need an Automatic Voltage Regulator (AVR) for HomePlug AV?

No. HomePlug Mediaxtream can operate in an environment using 100-240V.

How much is the power consumption of HomePlug Mediaxtream on a 230-volt power supply?

HomePlug Mediaxtream has a power consumption of 6.5 watts.

Can I use HomePlug Mediaxtream in an old house with old power supply lines (partly without separated ground wire)?

Yes. However, performance may be affected because of the quality of the wires.

Can I plug HomePlug Mediaxtream into a multiple socket switch or do I have to plug it directly to the wall socket?

You can plug HomePlug Mediaxtream into a multiple socket switch. However, we strongly advise to plug it directly to a wall socket to achieve optimal performance.

Do I need electrical grounding for the device?

HomePlug Mediaxtream does not require electrical grounding.

After a blackout, will HomePlug Mediaxtream switch on automatically?

Yes. If you experience connection issues, unplug the device and plug it back.

European Regulations

The product has been designed, tested and manufactured according to the European R&TTE directive 1999/5/EC.

CE 1313 !

⚠ Safety Warnings

For your safety, be sure to read and follow all warning notices and instructions.

- Do not open the device. Opening or removing the device cover can expose you to dangerous high voltage points or other risks. Only qualified service personnel can service the device. Please contact your vendor for further information.
- Do not use your device during a thunderstorm. There may be a risk of electric shock brought about by lightning.
- Do not expose your device to dust or corrosive liquids.
- Do not use this product near water sources.
- Make sure to connect the cables to the correct ports.
- Do not obstruct the ventilation slots on the device.